UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/743,765	01/16/2001	Fiorenzo Ardemagni	AS/MV-24524	7749

466 7590 01/14/2005

YOUNG & THOMPSON
745 SOUTH 23RD STREET
2ND FLOOR
ARLINGTON, VA 22202

EXAMINER	
BELIVEAU, SCOTT E	
ART UNIT	**PAPER NUMBER**
2614	

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/743,765	ARDEMAGNI, FIORENZO	
	Examiner	Art Unit	
	Scott Beliveau	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 3-14* is/are rejected.

7)☒ Claim(s) *2* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 January 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/16/2001*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because figure 2 includes reference character "14" not mentioned in the description. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 57 (Page 14, Line 35) and 56 (Page 15, Line 1). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required

corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The specification is objected to as failing to provide proper antecedent basis for the term "peripheral node". It is presumed that the "peripheral node" is referencing components associated with the "HFC network 2". See 37 CFR 1.75(d)(1) and MPEP § 608.01(o).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 4-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In particular, claim 4, requires that the frequency filtering and translating unit [30] comprises converter units [31/32] whose outputs are selected via a switch unit [47]. Subsequently, the output of the converter unit is claimed as being "outputted to said frequency filtering and translating unit". As claimed, this would require for a feedback loop wherein the output is subsequently fed back into the frequency filtering and translating unit as opposed to the disclosed process

wherein the outputs of the converter units [31/32] selected by the switch [47] are outputted either from the frequency filtering and translating unit [30] or are outputted to the combiner [48].

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1 and 9-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Kitamura et al. (US Pat No. 6,188,871).

In consideration of claim 1, Figure 3 of the Kitamura et al. reference illustrates an "optimized system for distribution of television and telecommunication services" from a "peripheral node" [101] to "user terminals" [117] wherein the "television services including land based radio frequency broadcast television channels, satellite based radio frequency broadcast television channels and HFC network or cable based broadcast television channels" and "each of said telecommunication services including a downstream data and/or voice channel and an upstream data and/or voice channel" (Col 6, Line 56 – Col 7, Line 4).

As shown in Figure 3, the "system" includes a "bi-directional switch exchange" and a "facility for bi-directional distribution of signals connected to said exchange" [104] (as actualized by the individual component of such) that is "connected to said peripheral node"

[101] and "at least a user apparatus connected to said bi-directional facility as well as to said user terminals" [117]. The "exchange" [104] is characterized in that it comprises a "filter" [105], a "frequency filtering and translating unit" [105/107], a "logic control unit" [109], a "combiner" [113], and a "selector" [115] wherein said "combiner" [110/113/120] and "selector [115] are "connected to said bi-directional distribution facility" [104]. As further illustrated in Figure 3, the signals belonging to said land based television channels are applied to the input of said combiner [110/113/120] whereupon the "filter" [105] receives the signals belonging to said cable based television channels and to said downstream data and/or voice channels, "separates" the signals belonging to said downstream data and/or voice channels from the signals belonging to said cable based television channels, "reallocates" the signals belonging to said downstream data and/or voice channels to pre-established frequencies by nature of separating the received signals from the combined signal and "applies" them to the input of said combiner [110/113/120]. The "filter" [105] also applies the signals belonging to said cable based television channels and the signals belong to said satellite based television channels to said frequency filtering and translating unit [105/107].

As illustrated in Figure 3, the "selector" [115] being connected to said bi-directional distribution facility [104] receives a local upstream data sequence therefrom, "applies" it to said control logic unit [109], "receives" the signals belonging to said upstream data and/or voice channels from said bi-directional distribution facility [104] and "applies" them to said peripheral node [101] in order to facilitate channel selection and/or voice communication. Subsequently, the control logic unit [109] generates control signals to be applied to said frequency filtering and translating unit [105/107] and a local downstream data sequence to be

applied to the input of said combiner [110/113/120] in order to select the signals belonging to both said cable based television channels and said satellite based television channels and frequency reallocating and/or translating them for applying them to the input of said combiner [110/113/120] wherein said combiner [110/113/120] mixes the input signals and applies them to said bi-directional distribution facility [104] for distribution (Col 6, Lines 56 – Col 7, Line 28; Col 7, Line 62 – Col 8, Line 19; Col 10, Lines 30 – 60).

As illustrated in Figure 12, the "user apparatus" [117] including an inherent demodulator for extracting the received modulated signal at the appropriate frequency, a "logic unit" [703], a "modulator" [704], and a "combiner" [705]. The "logic unit" [703] processing said local downstream data sequence outcoming from said demodulator (not shown). The modulator [704] modulates a local upstream data sequence related to said user apparatus [117] and the combiner [705] mixes the signals belonging to said local upstream data sequence as well as the signals belonging to upstream data and /or voice channels related to said user apparatus [117] and the plurality of devices associated with such and applies them to said bi-directional distribution facility [104] (Col 10, Line 61 – Col 11, Line 7).

Claim 9 is rejected wherein the bi-directional distribution facility [104] is an apparatus for centralized distribution of land based television channels (Col 5, Lines 5-15).

Claims 10 and 11 are rejected wherein each "user apparatus" [117] is connected to one or more telephone devices and/or to one or more Personal Computer (PC) and/or one or more communication apparatuses or Set-Top-Box (STB), with a pay television service provider [117] (Figure 3).

Claims 12 and 13 are rejected wherein the system of claim 1 is characterized in that the local upstream data sequences are modulated by PSK digital modulation (Col 10, Line 61 – Col 11, Line 3).

Claim 14 is rejected wherein the user apparatus [117] further as illustrated in Figure 3 comprises in inherent a "digital demodulator" arranged upstream of said logic unit [703] for the extraction of the received digitally modulated television signal, a frequency multiplexer (not illustrated) for distributing the various converted and modulated signals to the appropriate devices (ex. modulated telephony to the telephone), a "TELCO modulator/demodulator for telecommunication services" associated with the telephone set and/or fax machine, a "digital modulator" [704] which receives the television channel selection data from at least one user terminals such as the television receiver, and a combiner [705] arranged downstream of said TELCO modulator and the digital modulator (depending on the signal direction) and upstream of said bi-directional distribution facility [104].

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura et al. (US Pat No. 6,188,871).

In consideration of claim 3, the reference suggests the particular distribution of any known form of television service (Col 6, Lines 56 – Col 7, Line 4). The examiner takes OFFICIAL NOTICE that the particular distribution of "television channels related to closed circuit television systems (CCTV)" is well known in the art. Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made so as to further distribute "television channels related to the closed circuit television systems (CCTV)" such that they are coupled to the input of said combiner [110/113/120] or to said frequency filtering and translating unit [105/107] for the inherent advantages associated with such including the ability to provide the user with the means so as to monitor information of interest from a remote environment.

Allowable Subject Matter

10. Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. In particular, the Kitamura et al. reference as applied does not disclose or suggest that the aforementioned exchange [104] further comprises a "unit (18) for filtering the signals belonging to said land based television channels, which eliminates all replicated signals having the worst signal-to-noise ratio (SNR)". Rather, the reference suggests that all over the air analog channels which are received are subsequently transmitted to the subscriber.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure as follows. Applicant is reminded that in amending in response to a rejection of claims, the patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and the objections made.

- The Williams (US Pat No. 6,134,419) reference discloses a system for distributing transmodulated broadband audio-visual data to a plurality of units within a multiple dwelling unit.
- The Hamlin (US Pat No. 5,574,964) reference discloses a signal distribution system with a centralized converter for modulating the received signals on a common bus.
- The Macdonald et al. (US Pat No. 5,835,128) reference discloses a system for redistributing a television signal to multiple units within a building.
- The Shaffner et al. (US Pat No. 6,104,908) reference discloses a system for receiving and distributing diverse signals in a multi-unit complex.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Beliveau whose telephone number is 703-305-4907. The examiner can normally be reached on Monday-Friday from 8:30 a.m. - 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 703-305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SEB
January 5, 2005

JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600